

Delaware Spatial Data I-Team

**Room 112
Tatnall Building
Dover, DE
9:00 a.m.
August 23, 2002**

Meeting Minutes

I-Team Members Present:

Connie Holland, Office of State Planning Coordination
Tom Jarrett, DTI
Tim Westbrook, New Castle County
Mike Ward, Kent County
Steve Foley, Sussex County (For Mathew Laick)
Vince Rucinski, DelDOT (for Nathan Hayward)
N.V. Raman, DNREC (for Nicholas DiPasquale)
Dick Sacher, UD/RDMS
Sandy Schenck, DGS

Others Present:

Mike Mahaffie, Office of State Planning Coordination
Dorothy Morris, Office of State Planning Coordination
Mark Headd, DTI
Don Berry, Dept. of Education
Don Evans, EPA Region III
Phillip King, USDA-NRCS

Welcome and Introductions

Connie Holland began the meeting shortly after 9:00 a.m. and asked all those present to introduce themselves.

Mike Ward noted that with the resignation of Reed MacMillan from the Kent County Planning Office, he would be the I-Team representative from the County until further notice.

Approval of Minutes

A motion was made by Mike Ward, seconded by Tom Jarrett, and unanimously carried by all members present, to accept and approve the minutes of the April 9, 2002 I-Team Meeting.

Project/Information Updates

USGS MPO

Sandy Schenck announced that the USGS will establish a Mapping Partnership Office (MPO) at the University of Delaware. Sandy noted that, as the layers in the Delaware Framework are a combination of state and federal data sets and make up the first part of the USGS' new "National Map," it makes sense to have USGS staff on hand to work with Delaware to refine the

Framework data.

National Meetings

Mike Mahaffie announced that he will attend two national meetings related to the work of the I-Team during September. He will attend a workshop September 18 for state and local GIS leaders to talk about the GIS data needed for homeland security work at the federal level. On September 25 and 26, he will attend, and speak on DataMIL at, a workshop on the National Map concept sponsored by the USGS and by the National Research Council.

Orthophotography Project

Mike Mahaffie reported that the project is going well and that the work is on schedule. Mike stated that the pilot project will be done in Sussex County in the Route 1 area of Lewes/Rehoboth. Sandy Schenck noted that they are hoping to use USGS to do QA/QC for the project.

Tim Westbrook asked if there would be partial deliveries of the orthoimagery. Mike replied that there will be, based on work-flow by the contractor.

Sussex Cadastral Work

Connie Holland reported that the work is pretty near completion. This will help achieve the "Seamless map" sought by the Governor's office.

DataMIL Implementation

Dick Sacher gave an update on the DataMIL project (presentation attached). Dick noted that his staff is installing new versions of software and that the state's Spatial Data Clearinghouse is being migrated to a new system. Dick noted that there will be pop-up videos available on-line as tutorials. Dick stated that the DataMIL has received several awards including the ESRI Special Achievement in GIS (SIG) Award.

Sandy Schenck pointed out that the I-Team helped to create the Framework and is responsible for on-going maintenance of the Framework layers. He added that, since this will be the official map of Delaware, the framework layers need to be kept up to date. Tim Westbrook agreed and noted that the I-Team needs to be prudent about maintaining the layers and that money needs to be budgeted every year for maintenance.

Tom Jarrett noted that the information provided is great but it can be a double-edged sword because of security concerns. He explained that his job is to figure out how much information should be shared.

Mike Mahaffie reported on a discussion on this issue at a "Government Symposium on Information Sharing & Homeland Security" held the week before in Philadelphia. At that event, USGS leaders reported preliminary findings of a Rand Corporation study of the issue that, generally speaking, the economic benefits of keeping information more fully public outweigh the risks. It was noted in that discussion that most of the GIS data on-line is also readily available from other sources.

Don Berry noted that that the web “definitely makes it easier” but they could get the information anyway.

Sandy agreed that we should be careful but added that, if we think about Framework as being part of a National Map, the security risks are the same as what is now the case, given the availability of the USGS topographic maps. Cadastral data, he added, may be different.

Tim Westbrook stated that part of the way to handle the problem will be to develop, and adhere to, standards. Sandy agreed that the I-Team should look into standards.

New Projects

Watershed Delineation

Don Evans gave a power point presentation (attached) on the watershed delineation efforts under way among federal agencies. The federal agencies have identified the larger, regional watershed areas and are now trying to define smaller “5th and 6th order” watersheds that fall within those larger areas. Don noted that one of the biggest issues is consistent methodology across state lines.

In Delaware, a re-delineation of watershed areas is being undertaken by Paul Petrichenko, of the NRCS, who is working with USGS staff and plans to have his work reviewed by DNREC staff. After that review, the delineations should be considered for adoption by DNREC and the I-Team.

Elevation Data Update

Mike Mahaffie reported that the DNREC Coastal Programs office has been working with the local Flood Hazard Coordinator to develop a project to re-map the elevation of the state at a finer detail. The USDA’s NRCS, meanwhile, is interested in an update for the whole of the Delmarva Peninsula.

Those two organizations have formed the nucleus of a new Elevation Data Working Group that is proposing to issue a Request for Proposals for a statewide LIDAR project to create an elevation data set sufficient to provide 2-foot contour lines. The State’s current contour lines are no better than 10-feet and in some cases worse.

Mike noted that Coastal Programs has some grant funding available for the Inland Bays area and that that will form the start of a project. Elevation data for other parts of the state will be gathered as funding is available. Phil King noted that there may be some money available through NRCS, possibly \$100,000.

Potential Public/Private Partnership

Vince Rucinski reported that DelDOT is working to define the best way to keep the centerline data up to date. He said that he is working now within DelDOT to find which business units should play a part. He also plans to work with the Counties to make sure that the centerline data lines up with the cadastral data. Vince asked if this is a subject that should be discussed with the County Cadastral working group and it was agreed that it should. Mike Mahaffie will work with that group to find a next meeting date.

Vince also noted that the state has been approached by GDT, a data company, about the

possibility of a public/private partnership to maintain the centerline data. There were some concerns among the group and Vince noted that this is a subject that the working group should explore further.

Discussion Items

Memoranda of Agreement

Mike Mahaffie reported that only one of the MOA's for Framework data sets has been signed and that the others are still under consideration. NV Raman reported that he has not been able to review the MOA's that are proposed for DNREC, but that he plans to tackle them in the next week or so.

Tim Westbrook noted that MOA's may not be the best approach for County governments. Mike agreed that, though MOA's carry weight among state agencies, he understands Tim's concerns. Tim suggested that a letter stating what all parties understand may work better. Mike Ward and Steve Foley agreed and Mike Mahaffie promised to draft potential letters for consideration by the Counties.

Statewide Data Content Standards

There was a general discussion of the need for data standards to guide Framework and other data maintenance. Mark Head noted that the Department of Technology and Information (DTI) has authority to promulgate data standards. It was suggested that the I-Team, working through the SMAC and DGDC explore federal data standards and identify basic standards for consideration by DTI.

With no further business, the meeting was adjourned at 11:02.

The Delaware DataMIL

Project Update

Dick Sacher
University of Delaware

August 23, 2002
Delaware I-Team Meeting
Dover, DE

The Delaware DataMIL

- MPO: Mapping Partnership Office for Delaware
- Delaware FGDC Metadata Clearinghouse
- Map Laboratory – New Features
- Linking DataMIL & Federal Internet Map Services
- Presentations and Awards

MPO: Mapping Partnership Office

- Initially staffed by one USGS employee, starting Oct 1
- Office co-located with Delaware Geological Survey
- USGS liaison for
 - USGS layers in *The National Map* for Delaware
 - US Census TIGER/Line Modernization program

Delaware NSDI Metadata Clearinghouse

- New Metadata Server software
ESRI ArcIMS Metadata Server 4.01
- Migration of all entries in current Clearinghouse
- Delaware Metadata Explorer enhancements
Search by date
More readable results (XML style sheets)
- DIME (web-based metadata entry) enhancements
- Distributed maintenance
Direct network updates via ArcCatalog
Automated updates of live server via DIME
- FGDC grant awarded (8/1/2002)

Delaware Metadata Explorer

The screenshot shows a web browser window titled "Delaware Metadata Explorer - Microsoft Internet Explorer provided by University of Delaware". The page has a blue header with the text "delaware metadata explorer" and a "HELP" link. Below the header are two tabs: "SEARCH" (active) and "BROWSE".

SEARCH Section:

- 1** Type place name & press Find: [Text Input] **FIND**
- or draw search area ☐ : [Map Tools: Rectangle, Crosshair, Zoom In, Zoom Out, Pan, Full Screen]
- [Map of Delaware with a yellow search area highlighted]
- 2** Choose content type:
- Choose content theme:
- Optional Keyword (e.g. river): [Text Input]
- 3** **START SEARCH**
- ☐ Search NSDI Clearinghouse

How to search the Metadata Explorer

- 1** Specify the location you want to search.
Either
Type in a place name and press Find. A list of places that match what you typed will appear. Choose the place you want from this list.
Or
Draw a box on the map with the ☐ tool to define the area you want to search.
- 2** Choose any additional search criteria.
These choices are all optional.
- 3** Press "Start Search"

The browser status bar at the bottom shows "Done" and "Internet".

Delaware Metadata Explorer - Microsoft Internet Explorer provided by University of Delaware

delaware metadata explorer

HELP

SEARCH

BROWSE

Home

Categories

- Delaware Geological Survey
- Dept of Natural Res and Env Control
- Dept of Transportation
- Office of State Planning Coordination
- Site References
- United States Census Bureau
- United States Geological Survey

Records Found: 9

Home

Below is the Home content that is currently available.

Type of Content Shown on This Page	Records
Live Data and Maps	2
Downloadable Data	4
Offline Data	2
Clearinghouses	1

Live Data and Maps

back to top

Publisher: RDMS

Content Title: Delaware DataMIL Image Service

Publication Date: April, 2002



Done

Internet

Mapping Laboratory – New Features

- More online help
- Videos demonstrating common tasks (coming)
- Cartographic products – 22”x30” format
Sandy Schenck map layout committee

Integration with USGS Map Services

- LandSat image services (USGS EROS Data Ctr)
- Elevation Data map services (NED)
- National Land Cover Data map services (NLCD)
- National Hydrography Data map services (NHD)

Presentations and Awards

- Presentations

- ESRI International User Conference
- IASSIST 2002 (Int'l Assoc for Soc Sci Info & Tech)
- 2-day workshop, USGS Mid-Continent Mapping Ctr
- Council of Governments meeting
- NSGIC (Sept)

- Awards

- ESRI Special Achievement in GIS Award
- ArcNews 2-page article / Federal GIS Connections

Watershed Boundaries Dataset



A cooperative effort among USGS, NRCS, EPA and various state partners and stakeholders

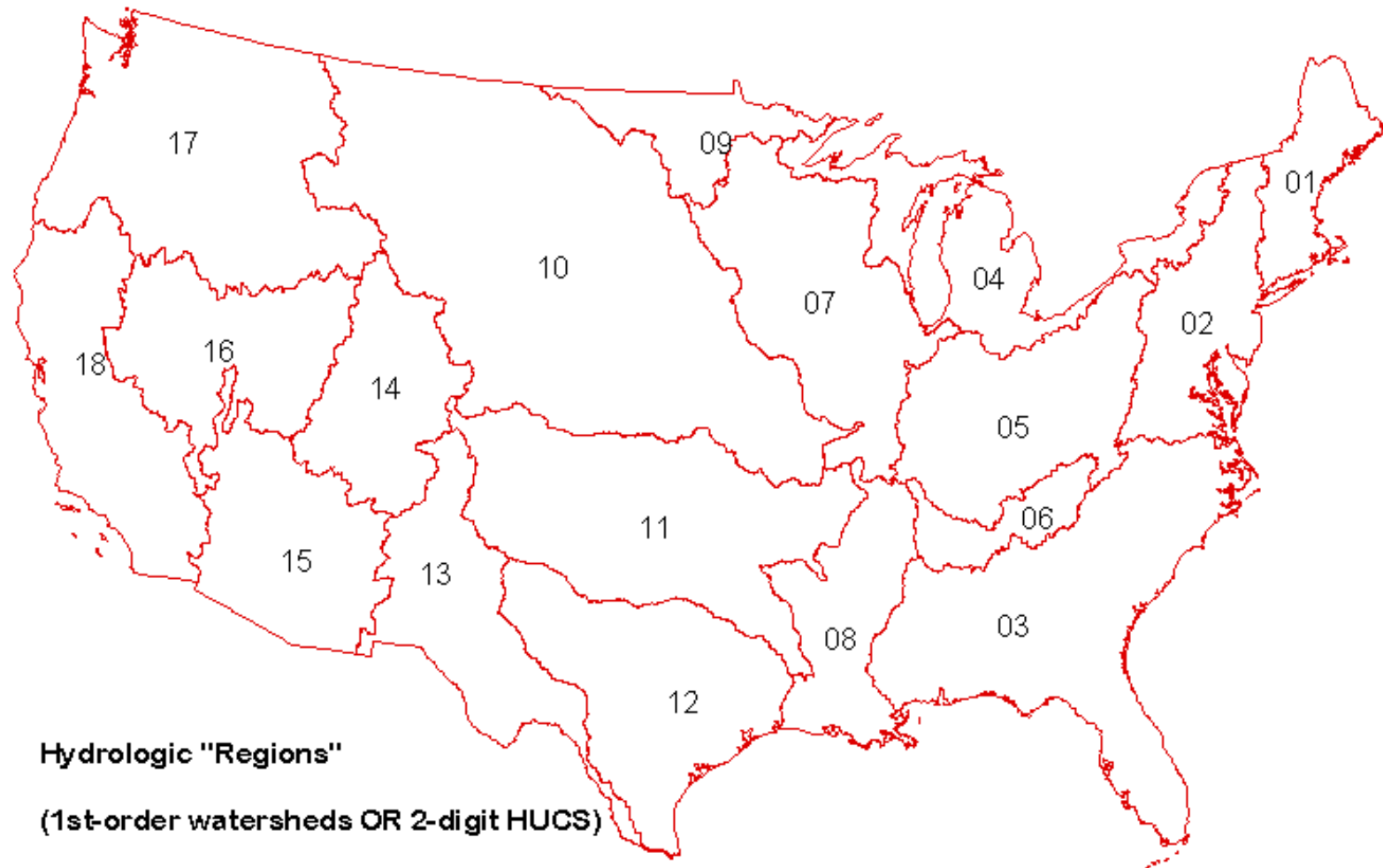
Watershed Boundaries Dataset

- Create a “hydrologically correct, seamless and consistent national Geographic Information System (GIS) database at a scale of 1:24,000, that has been extensively reviewed and matches the USGS topographical 7.5 minute quads”

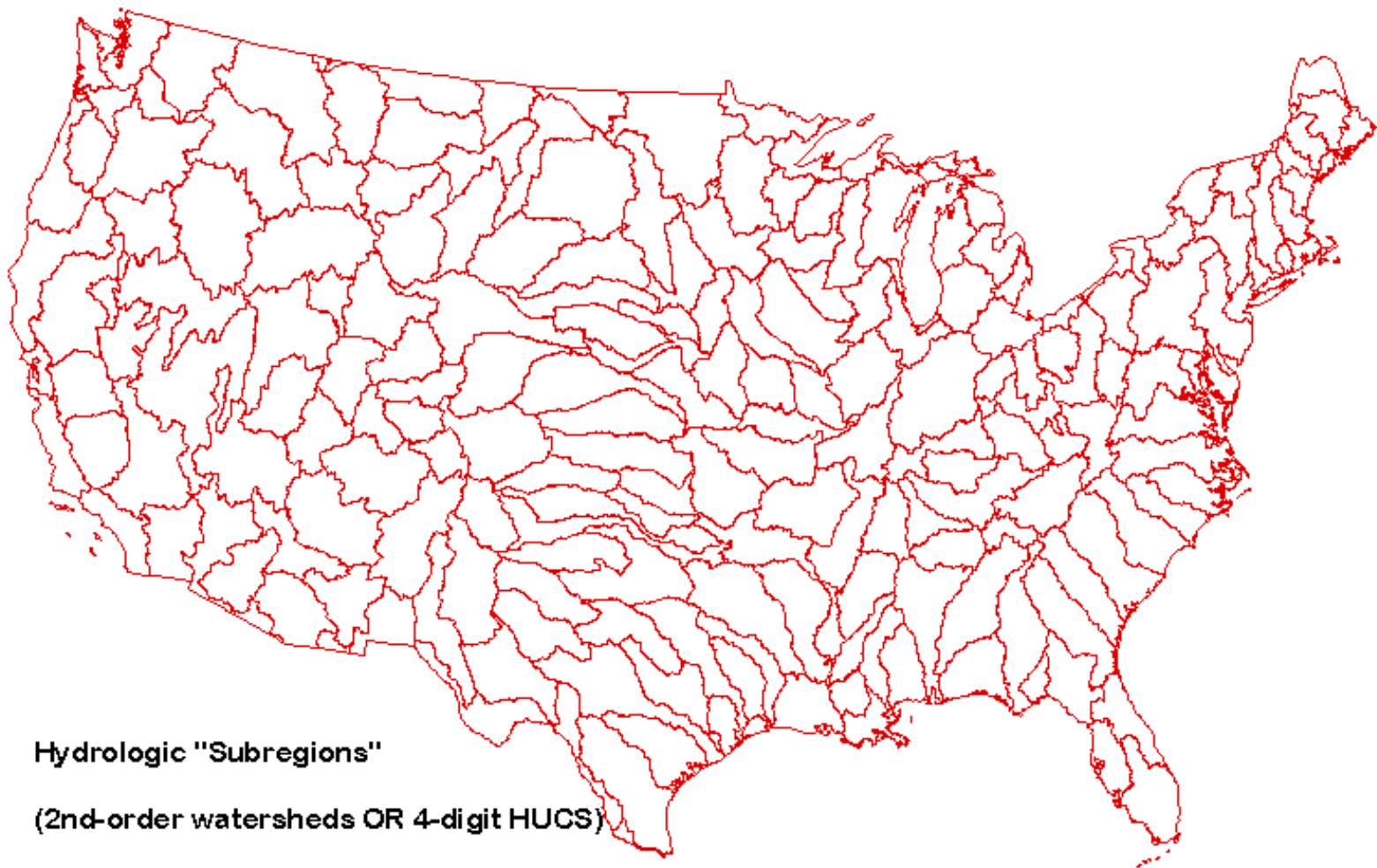
Current Boundaries

- Created in mid-1970's from 1:250K and 1:100K scale base data (GIRAS)
- Hierarchical model in four levels:
 - 21 “Regions”
 - 222 “Sub-regions”
 - 352 “Accounting Units”
 - 2,149 “Cataloging Units”
- Good for national and regional projects
- Overlap problems with larger-scale stream network data

Current Boundaries



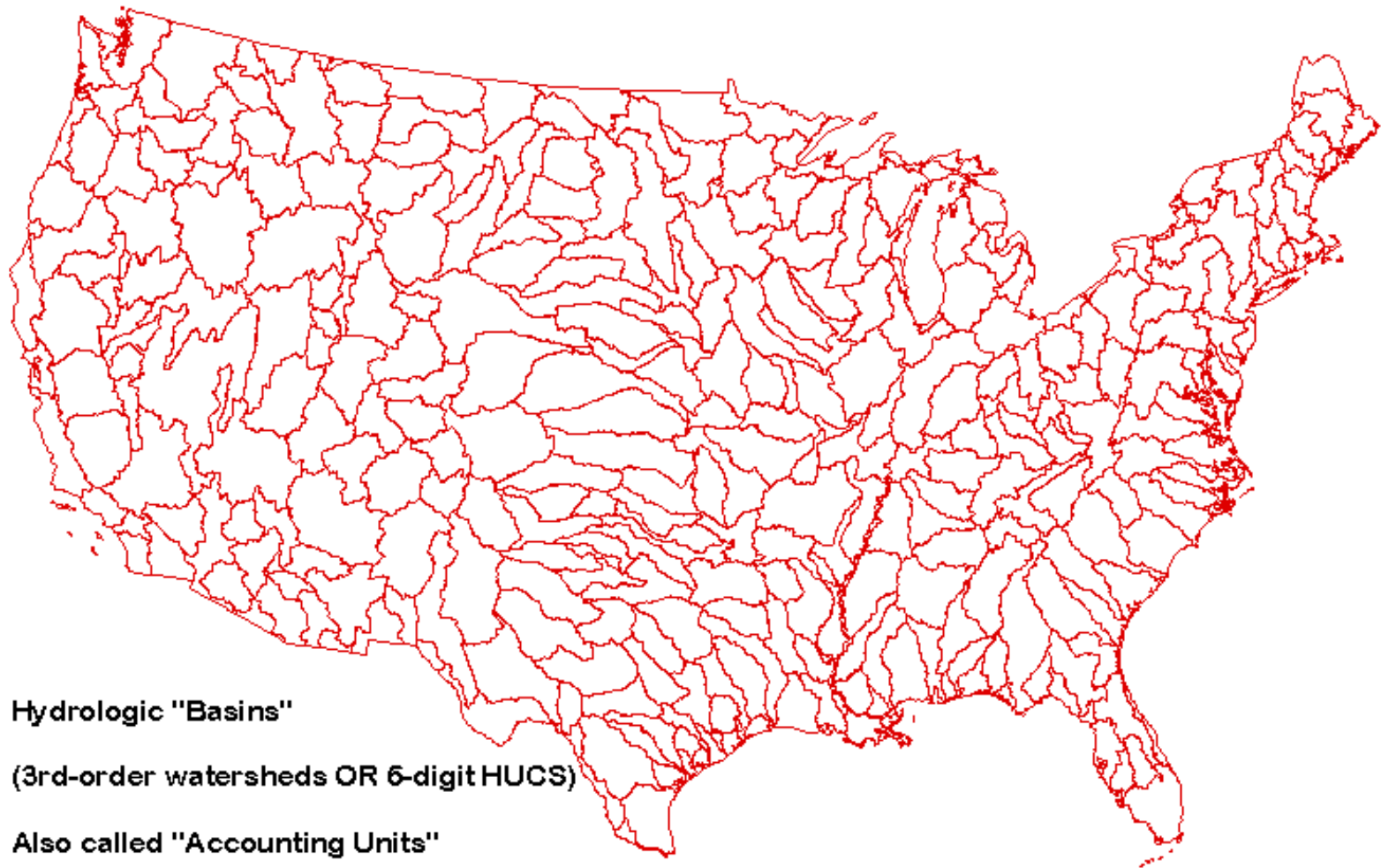
Average Size: 177,560 mi²



Hydrologic "Subregions"

(2nd-order watersheds OR 4-digit HUCs)

Average Size: 16,800 mi²

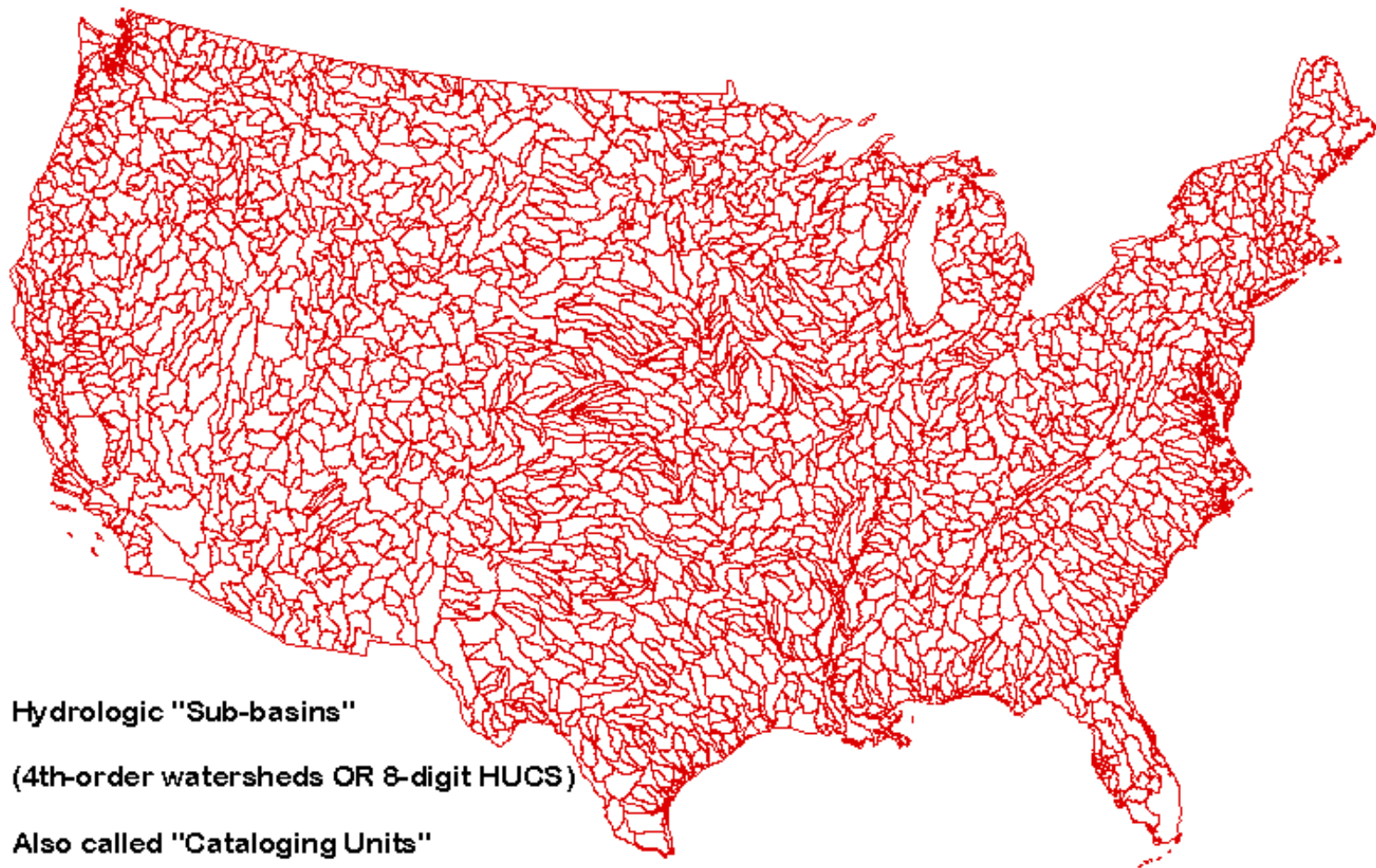


Hydrologic "Basins"

(3rd-order watersheds OR 6-digit HUCS)

Also called "Accounting Units"

Average Size: 10,596 mi²



Hydrologic "Sub-basins"

(4th-order watersheds OR 8-digit HUCS)

Also called "Cataloging Units"

Average Size: 703 mi²

New Boundaries

- 5th-order “Watersheds” (63-391 mi²)
- 6th-order “Sub-watersheds” (16-63 mi²)
- 1:24K or better base maps and data
- 22,000 5th-order and 160,000 6th-order when finished.

States vs. Feds

- States doing their own work at a 1:24K scale may receive certification
- Feds work in states where either no work is being done or base data is not at least 1:24K
- Feds using Stage I, II & III processing

Enhanced Base & Reference Data (where available)

- Higher-resolution DEMs
- LIDAR
- High-resolution imagery
- Local knowledge

Stage I Delineation Process

- “Blind Pass” - automated processing using National Elevation Dataset
- Work completed by National Weather Service (2 mi² catchments)
- Data combined with GIS tools and distributed to participants

Stage II Delineation Process

- Receive Stage I base data from USGS EROS Data Center
- Delineate 5th-order watersheds
- Delineate 6th-order watersheds
- Identify possible errors
- Return completed data to EROS

Stage III Delineation Process

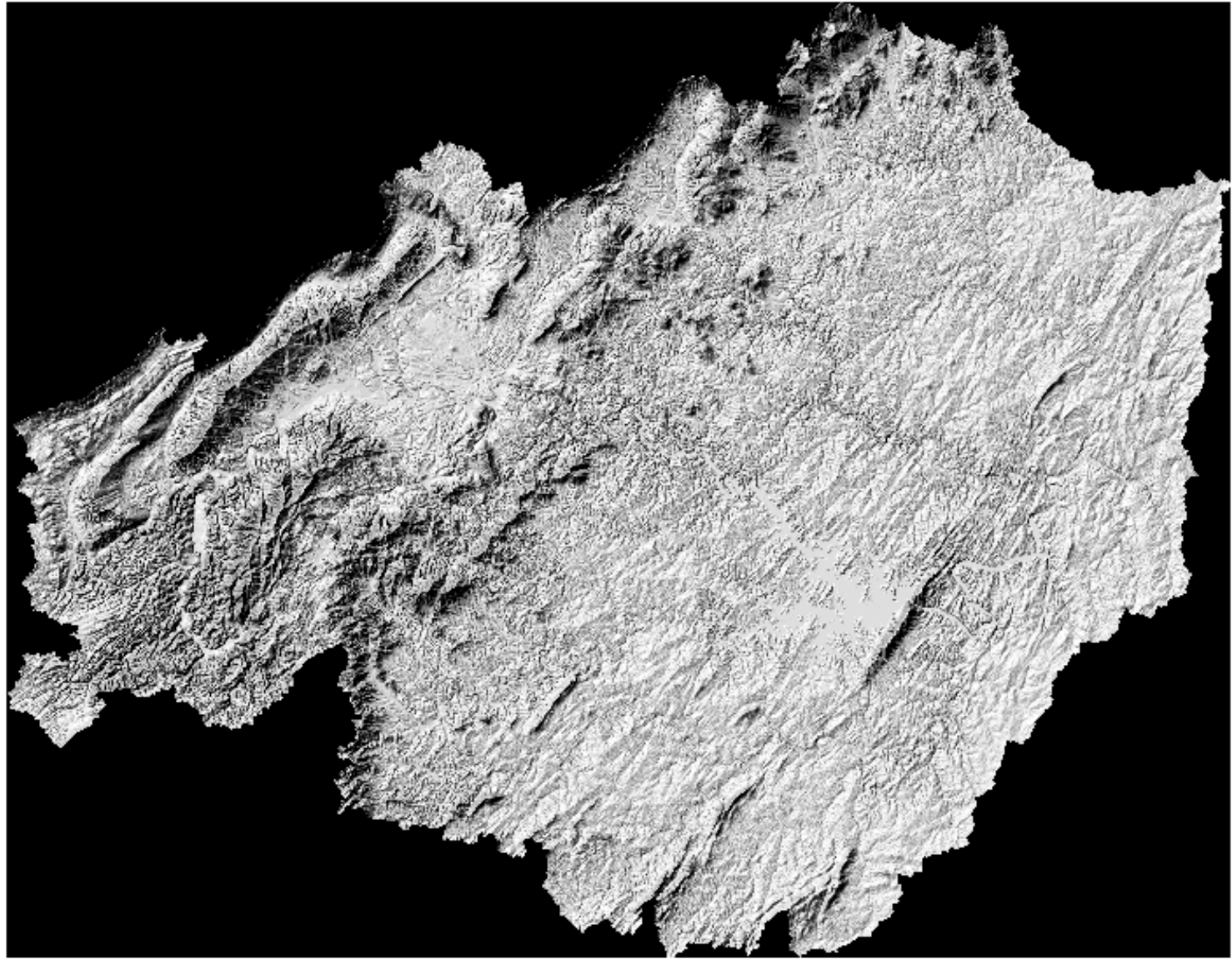
- Receive Stage II data back from participants
- Determine best method for fixing errors
- Release to public

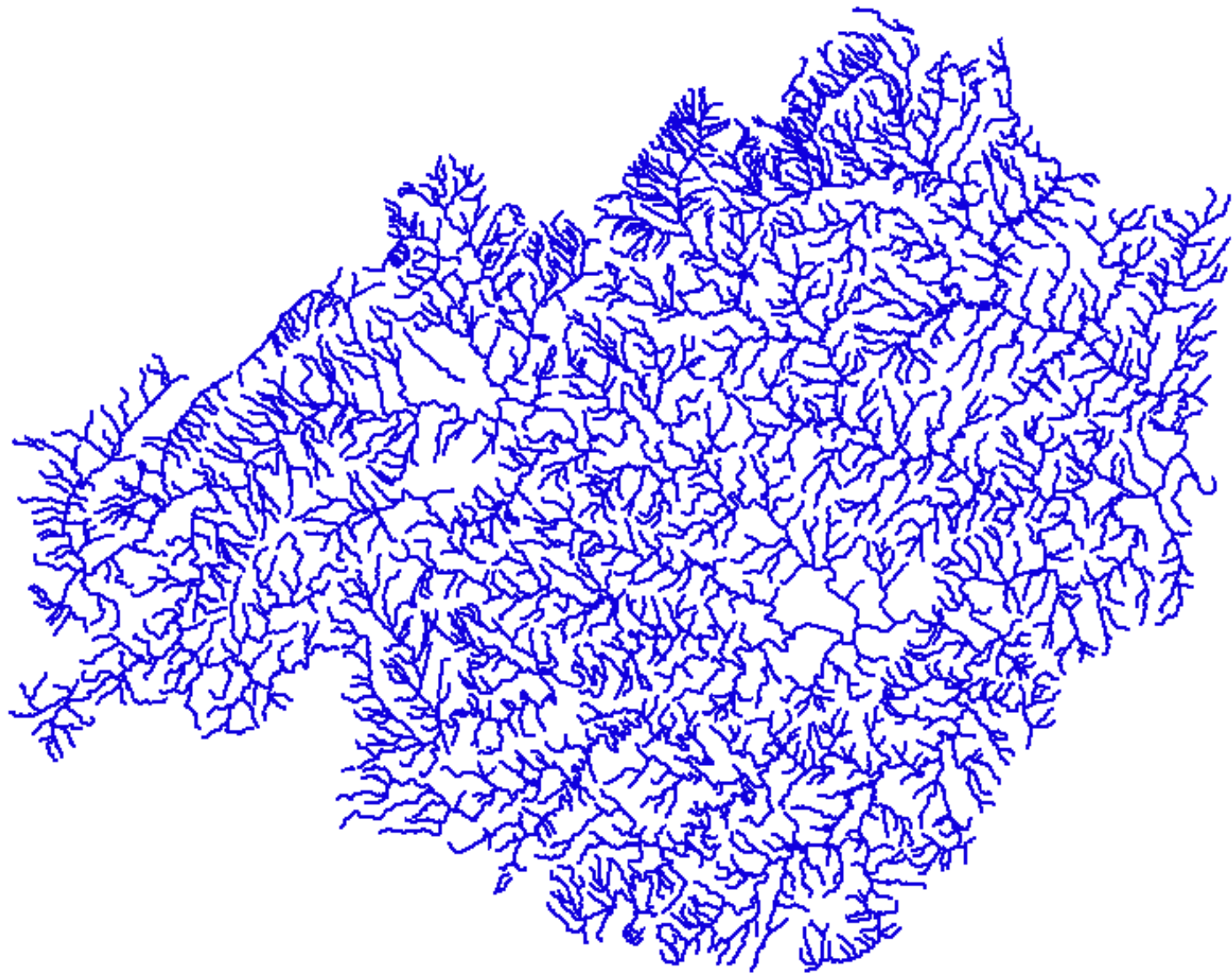
New Delineations

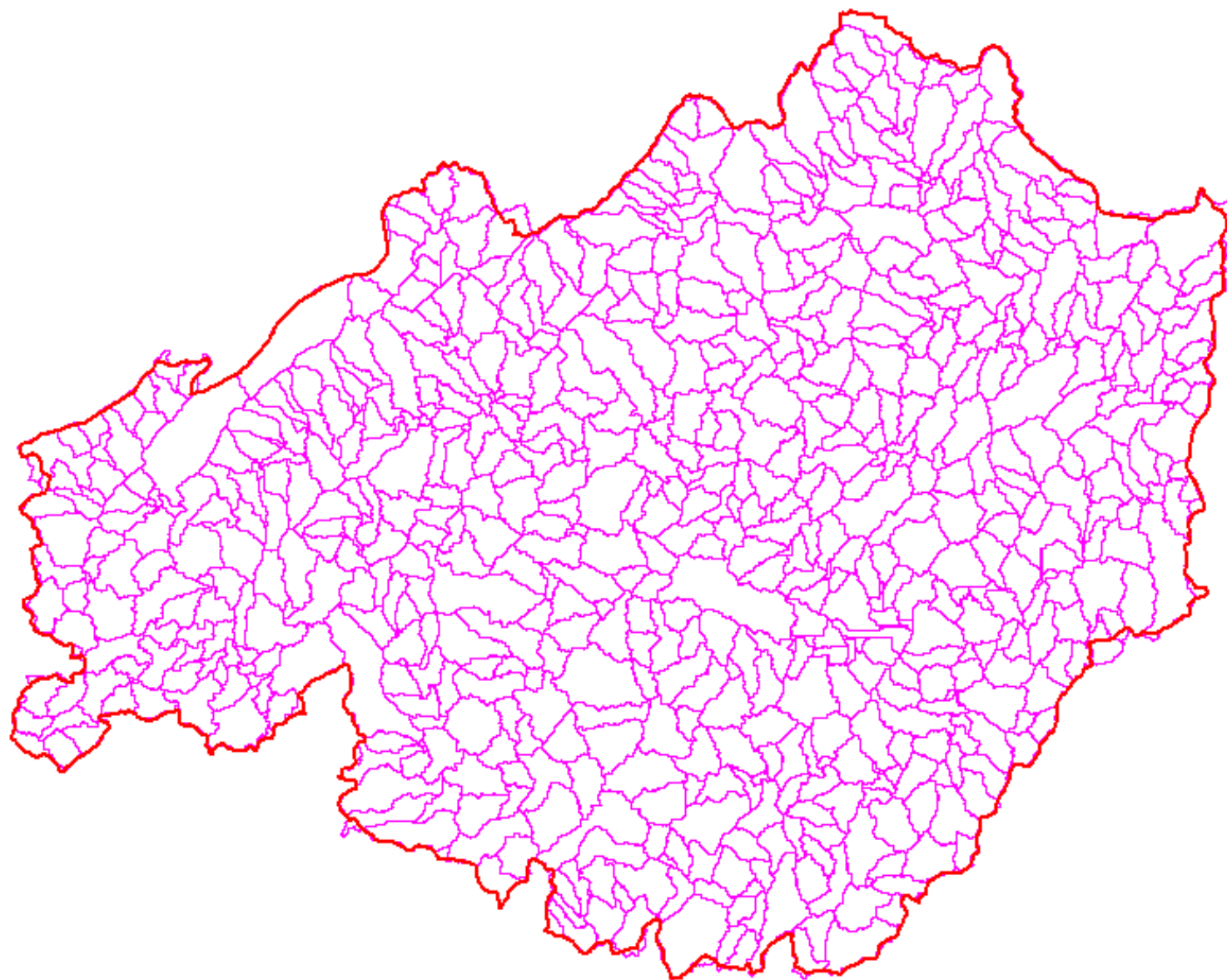
- 5th-order (Watersheds): 63-391 mi²
- 6th-order (Sub watersheds): 16-63 mi²

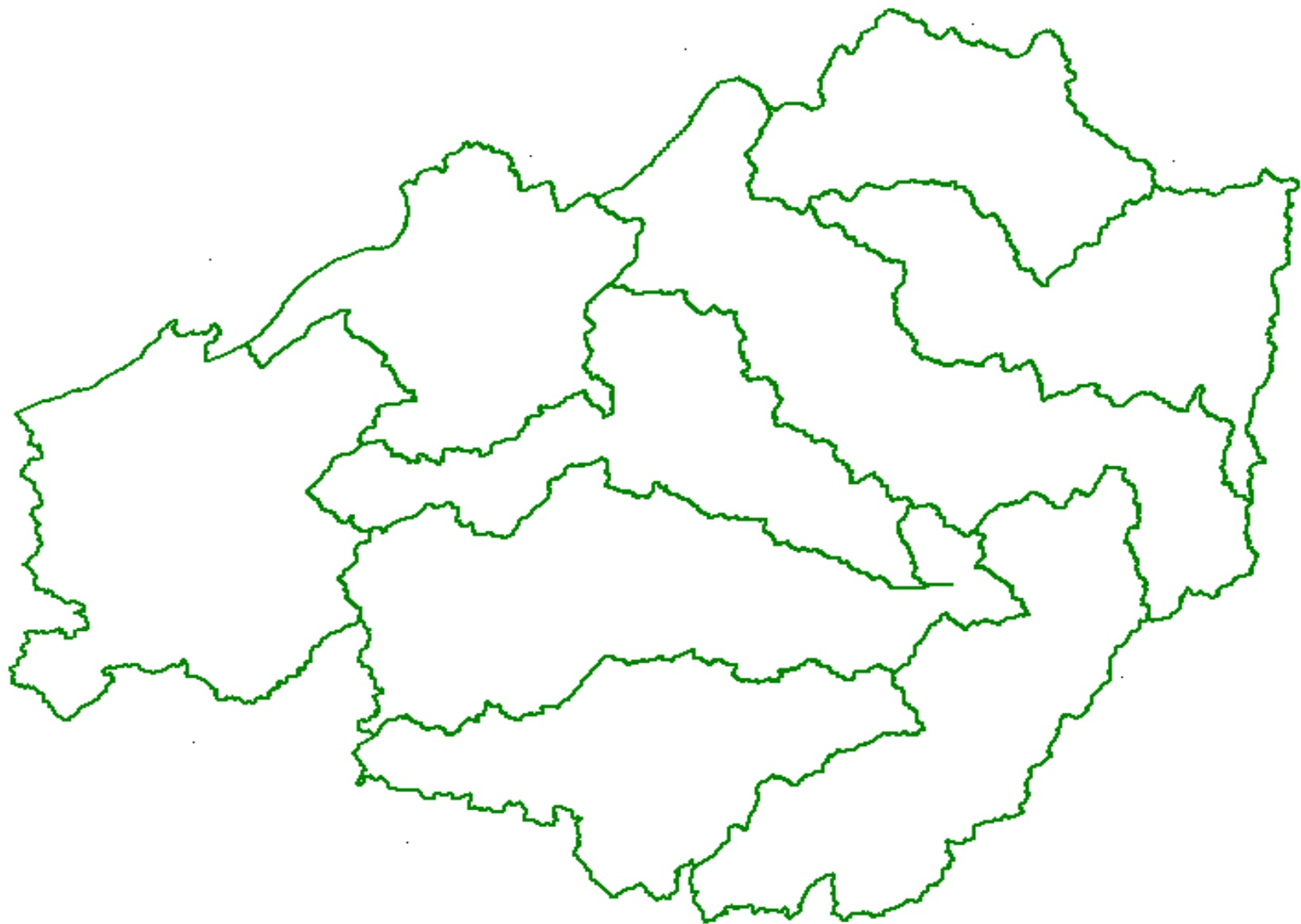


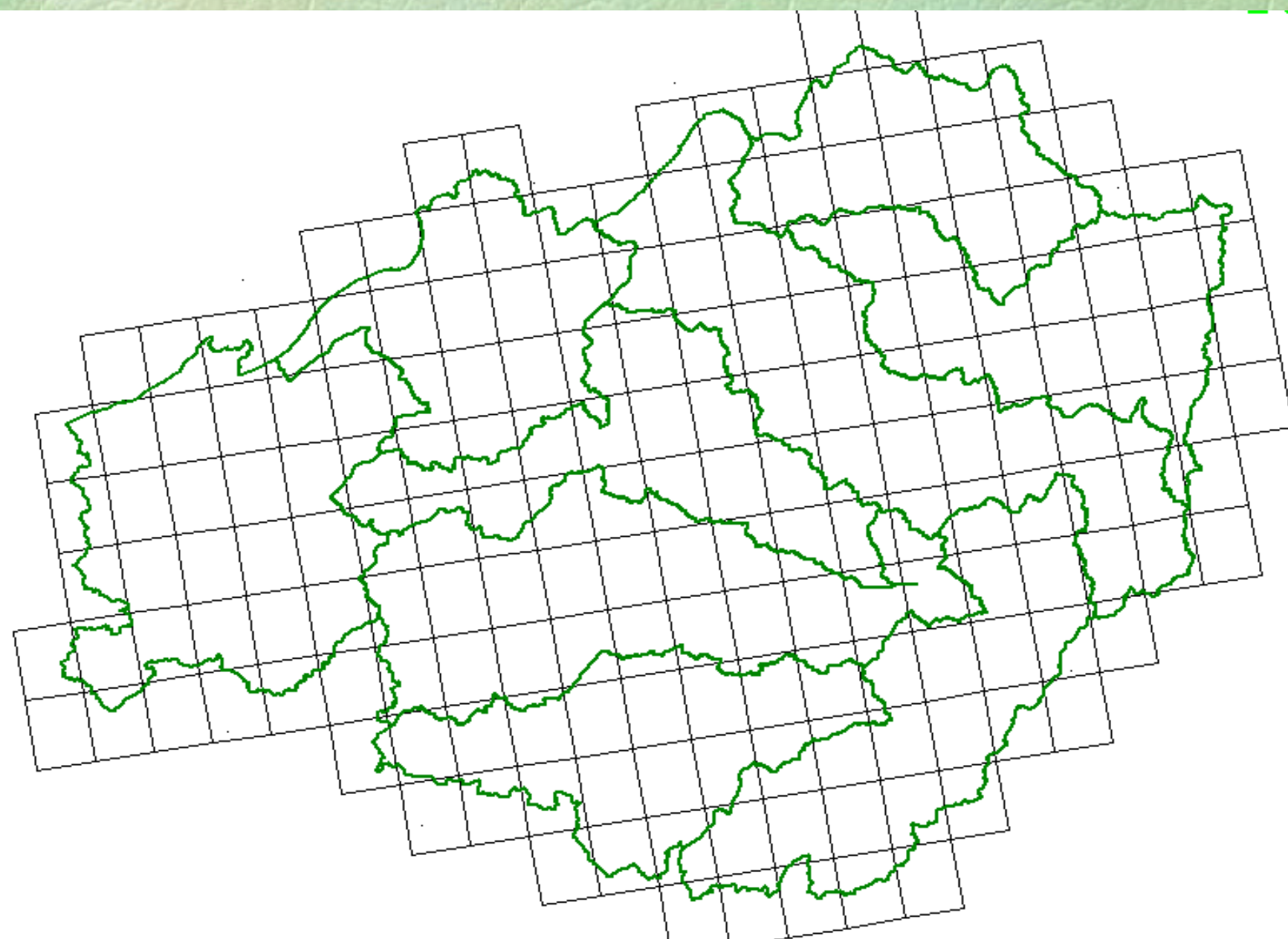
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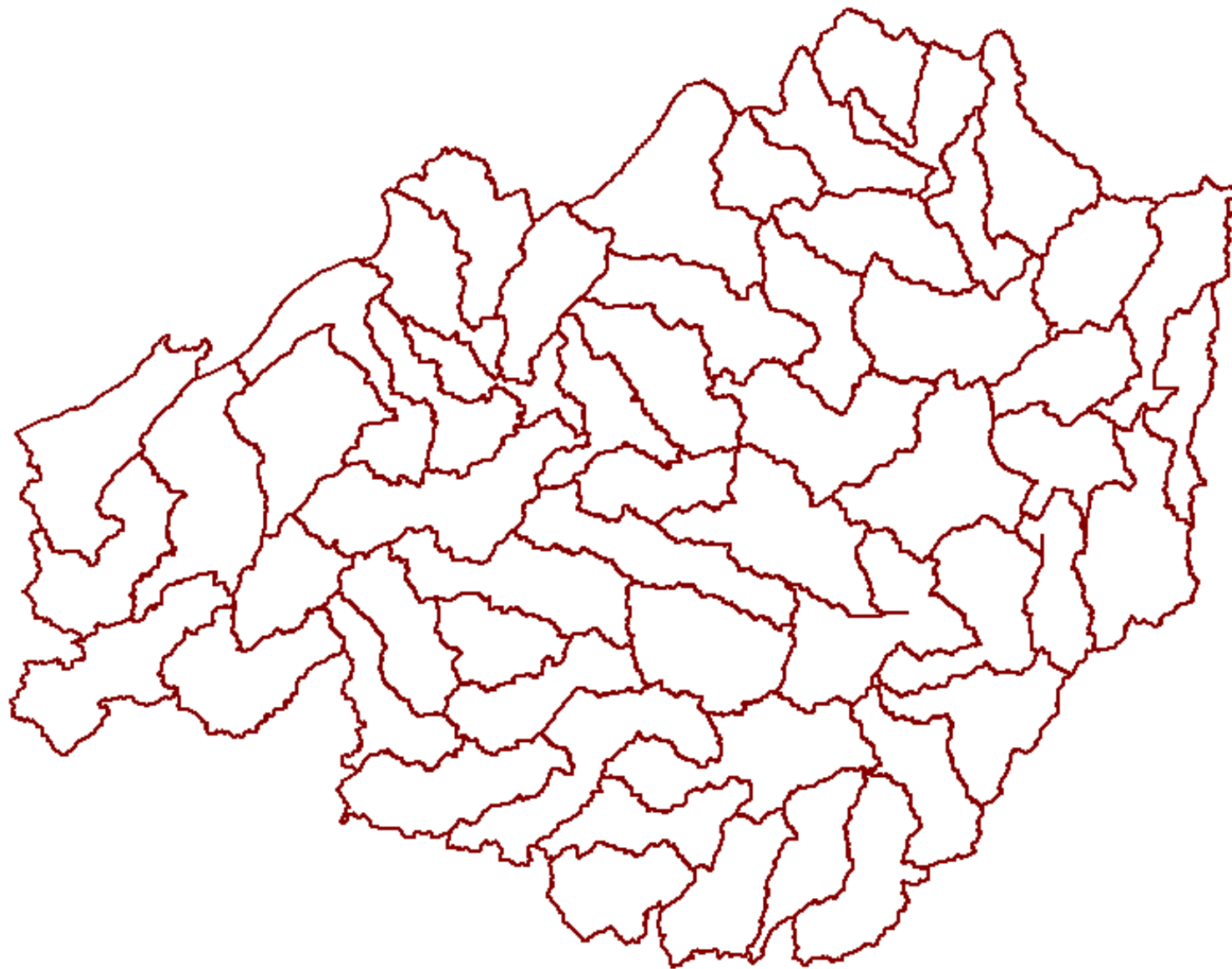




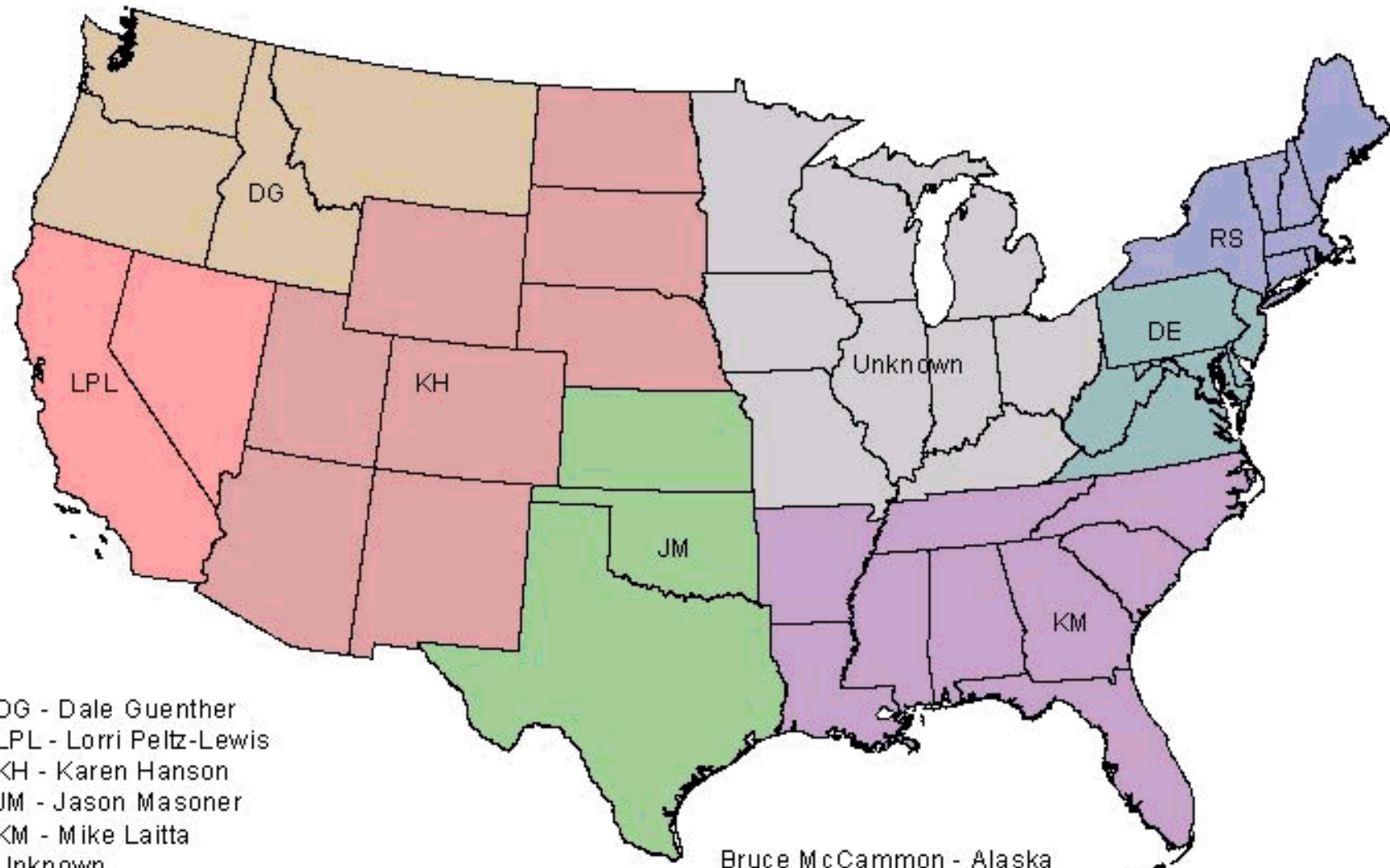








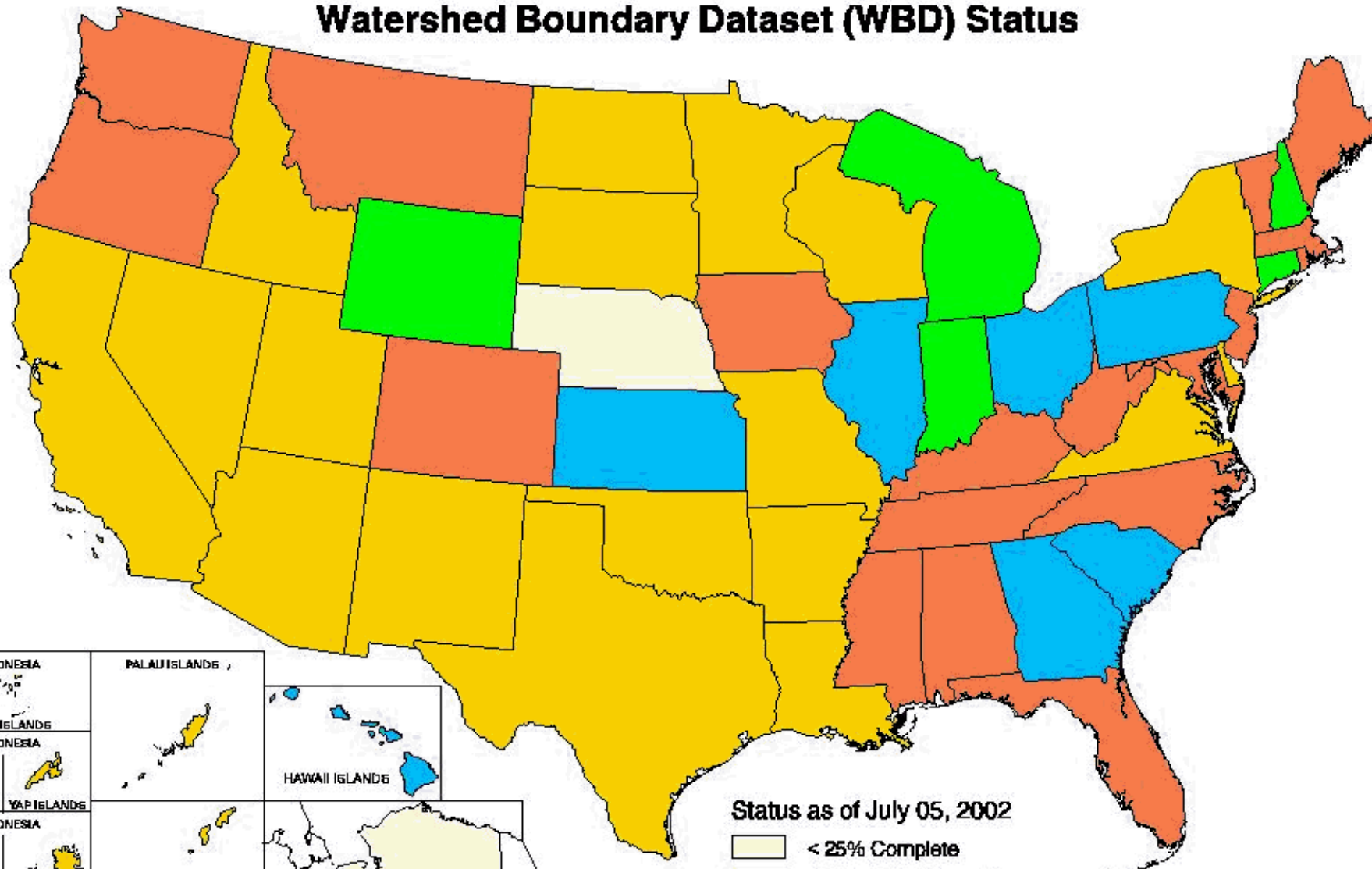
HU Regional Coordinators - June 25, 2002



DG - Dale Guenther
LPL - Lorri Peltz-Lewis
KH - Karen Hanson
JM - Jason Masoner
KM - Mike Laitta
Unknown
RS - Reed Simms
DE - Don Evans

Bruce McCammon - Alaska
Randy Ferguson - Puerto Rico/U.S.
Virgin Islands, Hawaii, Pac Basin

Watershed Boundary Dataset (WBD) Status



Status as of July 05, 2002

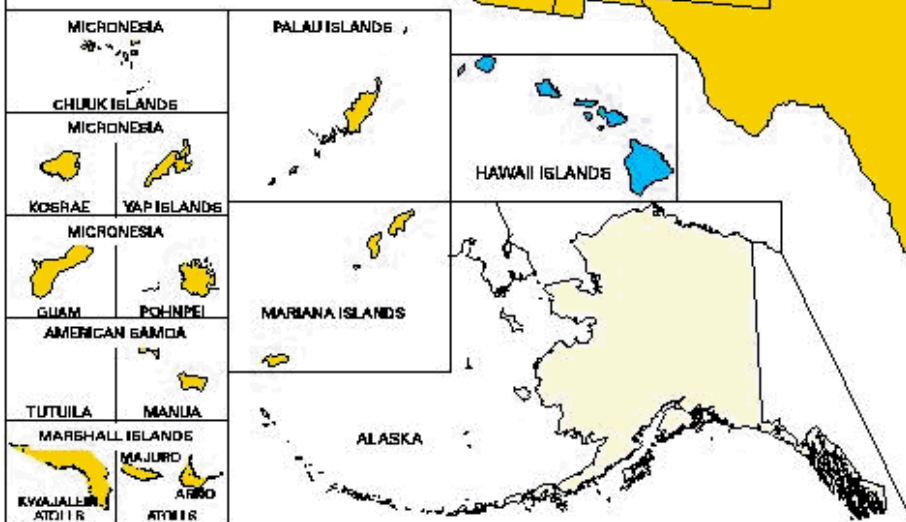
- < 25% Complete
- 25% to 75% Complete
- 75% Complete to In State Review
- Submitted to NCGC
- Provisional Verification

*In national review or attributes do not meet inter-agency guidelines.

<http://fw.nrcs.usda.gov/jpg/hucstatusstate.html>



Revised July 2002

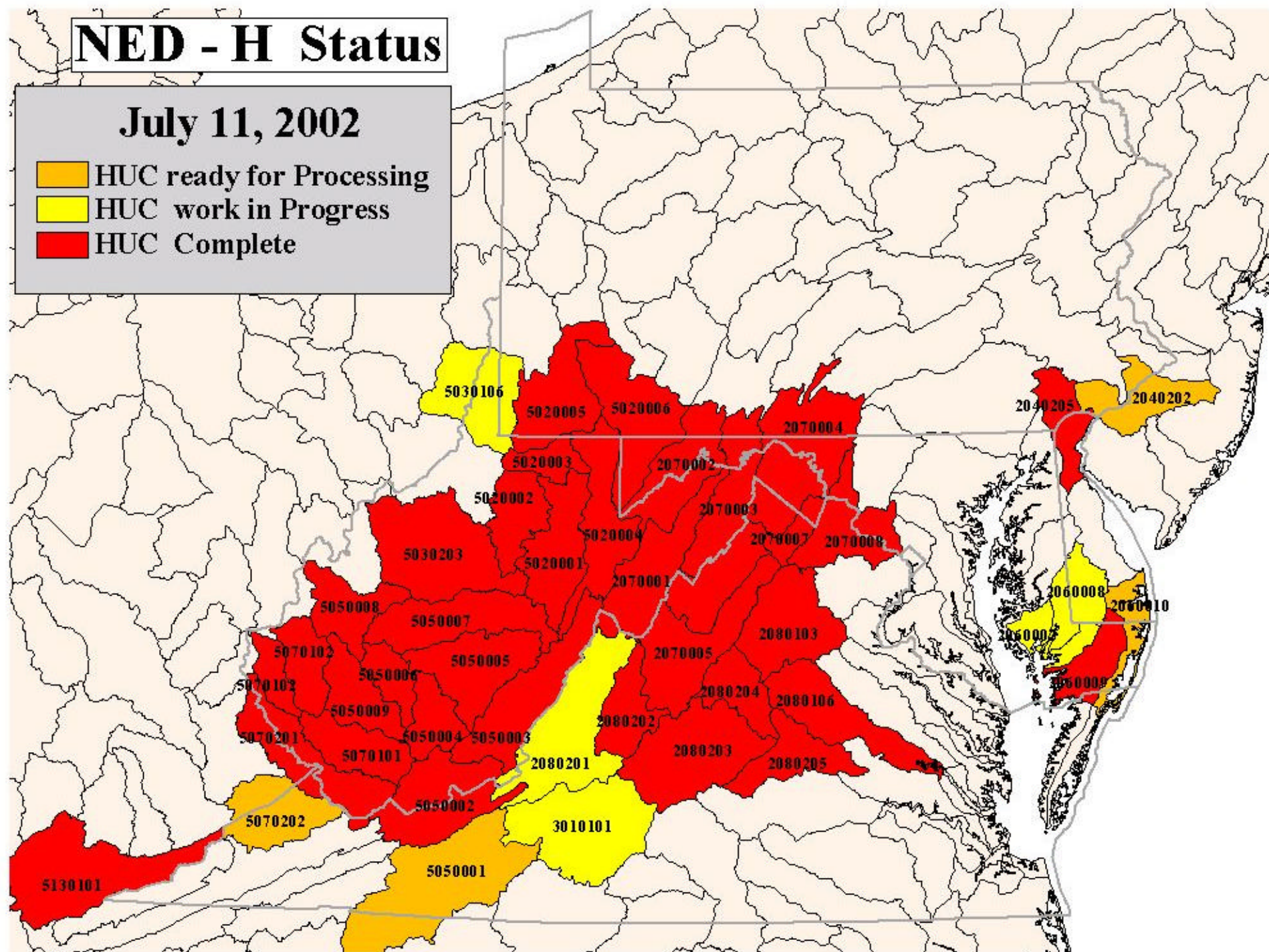


Source:
Status from USDA NRCS web site http://www.nhrc.nrcs.usda.gov/assal-bin/huc_status
DMA Operational Navigation Chart (ONC) 1:1,000,000 series & Bureau of Census 1992 TIGER 1:100,000 series.

NED - H Status

July 11, 2002

- HUC ready for Processing
- HUC work in Progress
- HUC Complete



Major Issues to Address

- Interstate watersheds - consistent methodology across state lines

Web Links for more information

http://www.ftw.nrcs.usda.gov/huc_data.html